

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 7094 - L2 Version 2
Chandra X-Ray Center

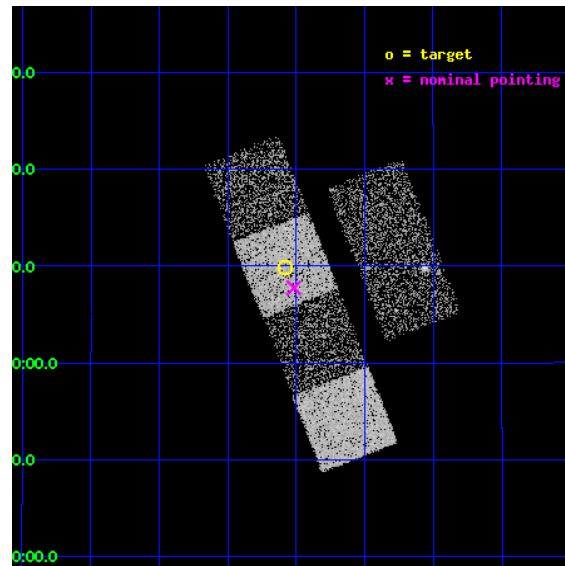
L2 Processing Date : Apr 2 2012

Contents

| | | |
|----------|-------------------------------|-----------|
| 1 | Front | 2 |
| 2 | OBI | 3 |
| 2.1 | OBI | 3 |
| 2.1.1 | Images | 3 |
| 2.1.2 | Bias | 3 |
| 2.1.3 | Parameters | 4 |
| 2.1.4 | Events | 4 |
| 2.2 | Compared Parameters | 5 |
| 2.3 | Aspect | 6 |
| 2.4 | Star Slots | 9 |
| 2.4.1 | Slot 3 | 9 |
| 2.4.2 | Slot 4 | 10 |
| 2.4.3 | Slot 5 | 11 |
| 2.4.4 | Slot 6 | 12 |
| 2.4.5 | Slot 7 | 13 |
| 2.5 | FID Slots | 14 |
| 2.5.1 | Slot 0 | 14 |
| 2.5.2 | Slot 1 | 15 |
| 2.5.3 | Slot 2 | 16 |
| A | Summary | 17 |
| A.1 | Status | 17 |
| A.2 | Comments | 17 |

1 Front

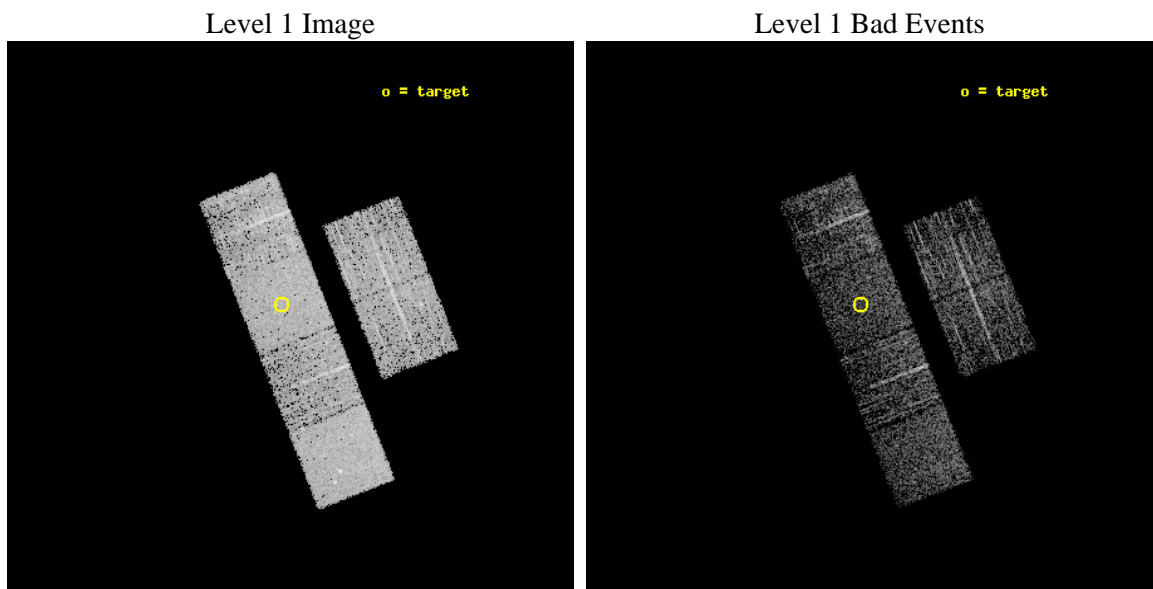
| | | |
|----------|--|---|
| seq_num | 600532 | Sequence number |
| obs_id | 7094 | Observation id |
| title | A Complete Sample of ULX Host Galaxies | Proposal title |
| observer | Douglas Swartz | Principal investigator |
| object | NGC 3239 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 156.270417 | Observer's specified target RA [deg] |
| dec_targ | 17.163611 | Observer's specified target Dec [deg] |
| ra_nom | 156.25451101961 | Nominal RA [deg] |
| dec_nom | 17.12939333644 | Nominal Dec [deg] |
| roll_nom | 248.51075586357 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 1951.9999927282 | Sum of GTIs [s] |
| livetime | 1927.282593467 | Livetime [s] |
| ontime2 | 1951.9999927282 | Sum of GTIs [s] |
| ontime3 | 1951.9999927282 | Sum of GTIs [s] |
| ontime5 | 1951.9999927282 | Sum of GTIs [s] |
| ontime6 | 1951.9999927282 | Sum of GTIs [s] |
| ontime7 | 1951.9999927282 | Sum of GTIs [s] |
| ontime8 | 1951.9999927282 | Sum of GTIs [s] |
| l2events | 28237 | Number of level 2 events |



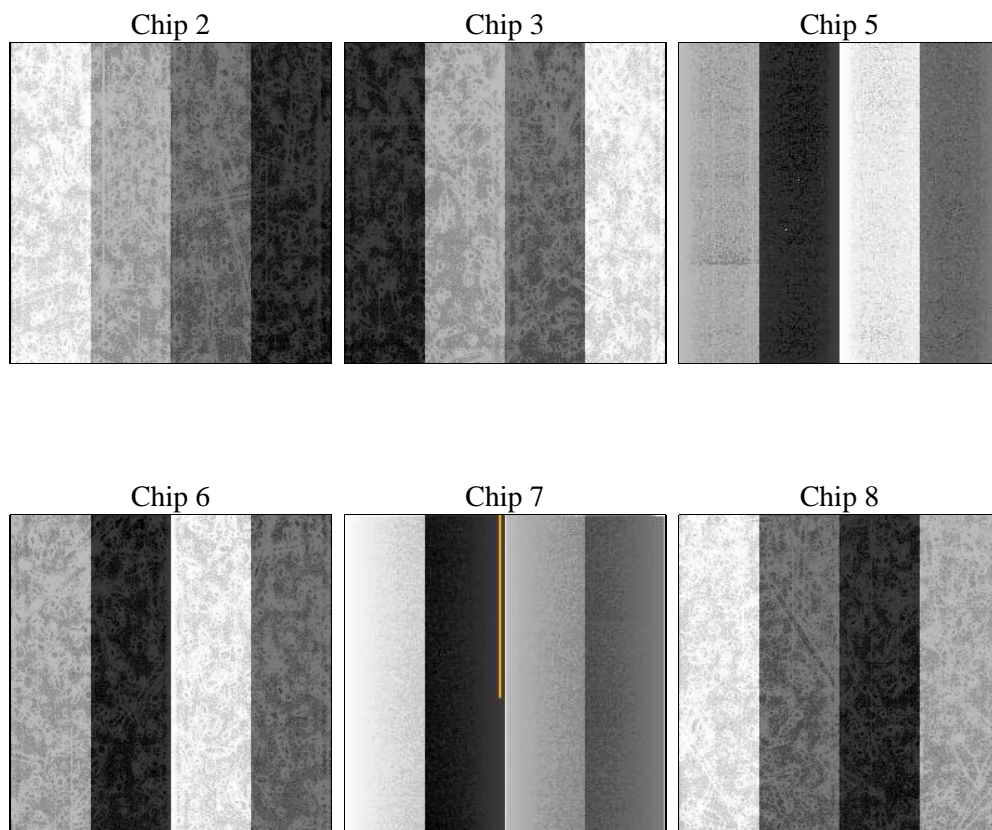
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 2000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.3.1 | Processing system revision | ontime | 1951.9999927282 | Sum of GTIs [s] |
| caldsver | 4.4.9 | | ontime2 | 1951.9999927282 | Sum of GTIs [s] |
| date | 2012-04-02T03:06:50 | Date and time of file creation | ontime3 | 1951.9999927282 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime5 | 1951.9999927282 | Sum of GTIs [s] |
| | | | ontime6 | 1951.9999927282 | Sum of GTIs [s] |
| | | | ontime7 | 1951.9999927282 | Sum of GTIs [s] |
| | | | ontime8 | 1951.9999927282 | Sum of GTIs [s] |
| | | | l1events | 123715 | Number of level 1 events |

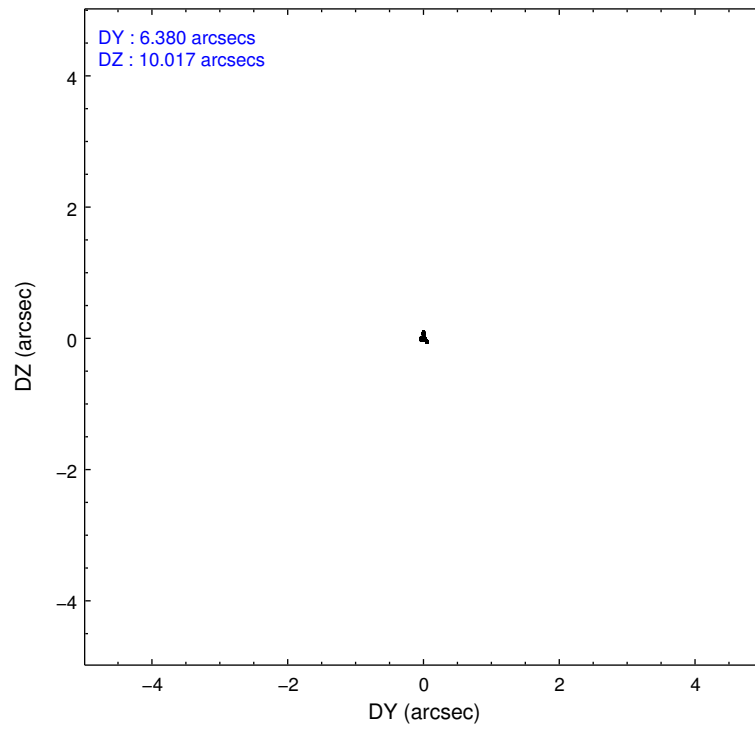
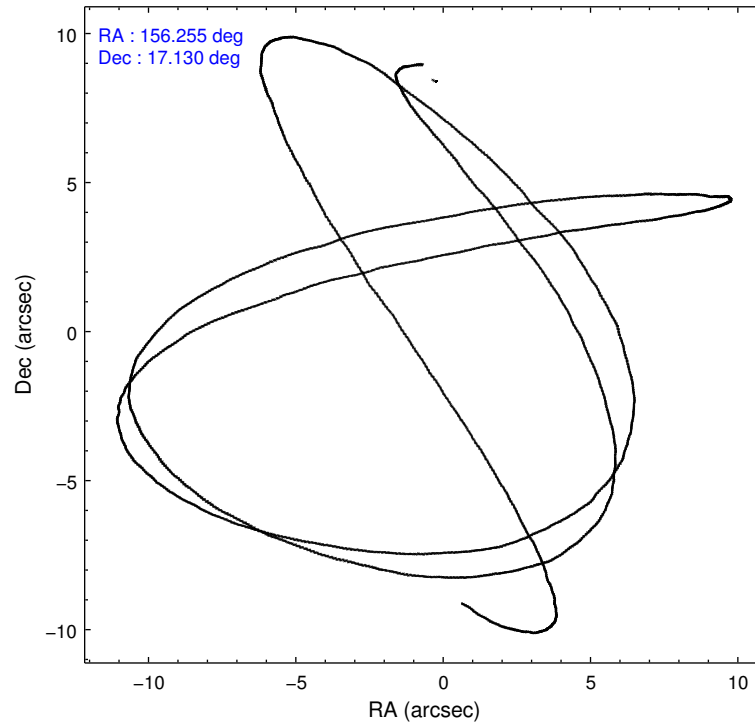
2.1.4 Events

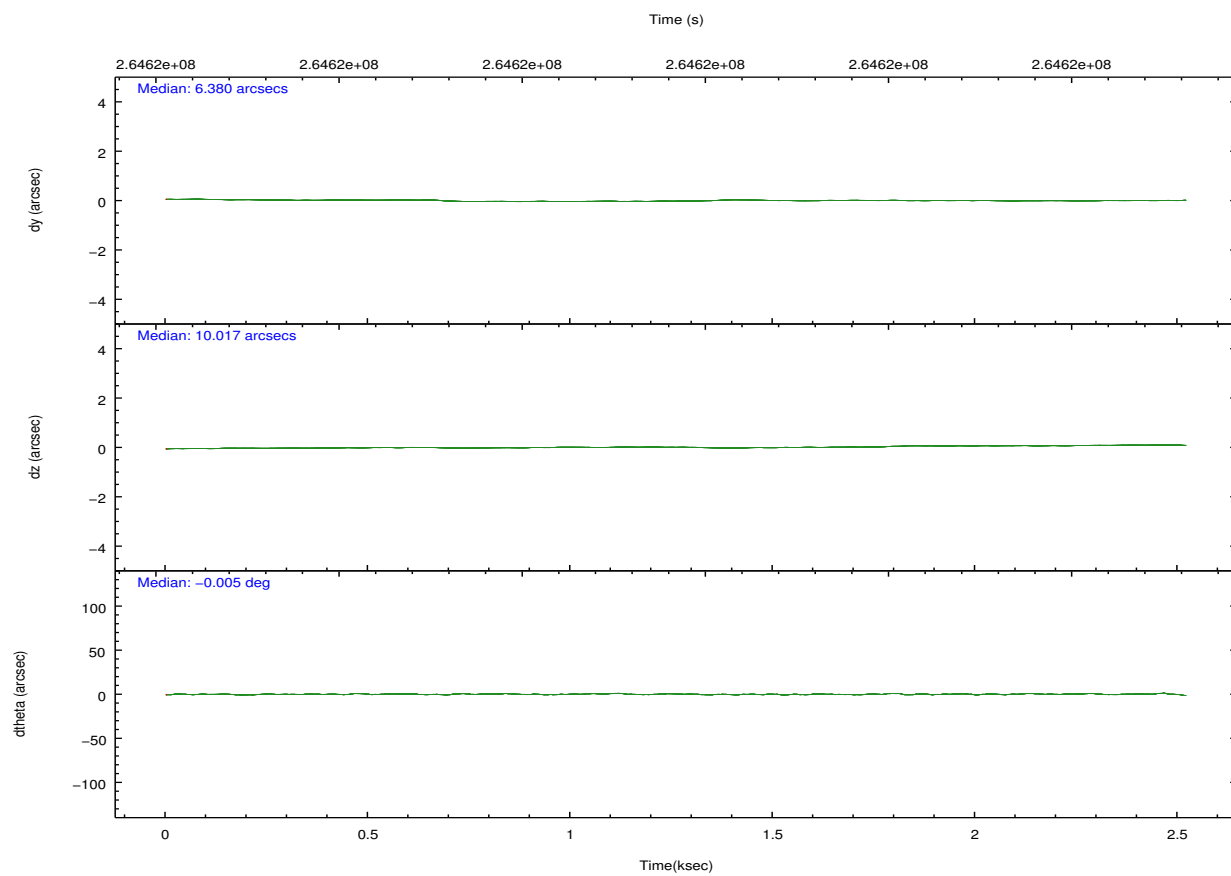
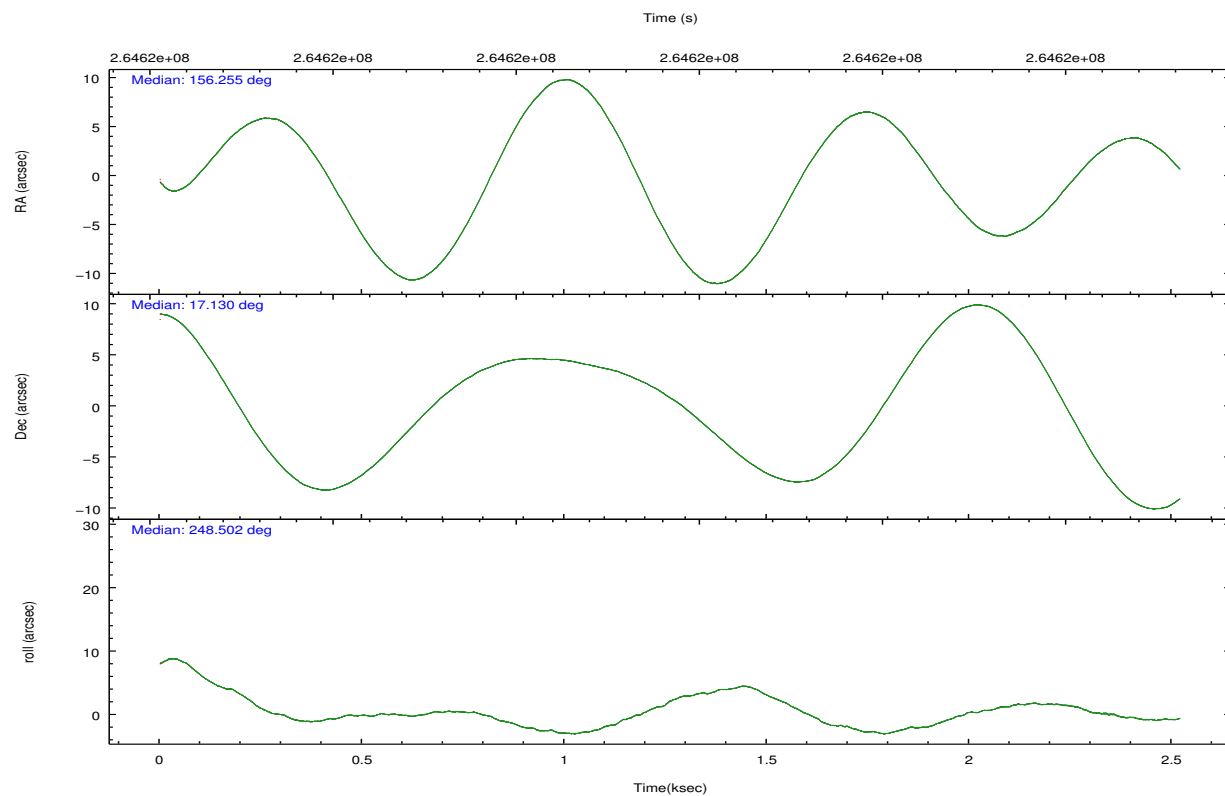
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|-------|-------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 17501 | 18625 | 26099 | 16899 | 23402 | 21189 | grade 0 events | 1091 | 806 | 1125 | 837 | 869 | 1503 |
| rejected events | 15234 | 16629 | 14171 | 14832 | 13605 | 16599 | | 6% | 4% | 4% | 4% | 3% | 7% |
| rejected % | 87% | 89% | 54% | 87% | 58% | 78% | grade 1 events | 12 | 12 | 23 | 7 | 20 | 16 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 450 | 432 | 3609 | 444 | 1936 | 1041 |
| | | | | | | | | 2% | 2% | 13% | 2% | 8% | 4% |
| | | | | | | | grade 3 events | 204 | 215 | 380 | 191 | 867 | 480 |
| | | | | | | | | 1% | 1% | 1% | 1% | 3% | 2% |
| | | | | | | | grade 4 events | 179 | 201 | 369 | 191 | 839 | 422 |
| | | | | | | | | 1% | 1% | 1% | 1% | 3% | 1% |
| | | | | | | | grade 5 events | 653 | 796 | 1712 | 777 | 2173 | 1052 |
| | | | | | | | | 3% | 4% | 6% | 4% | 9% | 4% |
| | | | | | | | grade 6 events | 350 | 349 | 6482 | 413 | 5311 | 1157 |
| | | | | | | | | 1% | 1% | 24% | 2% | 22% | 5% |
| | | | | | | | grade 7 events | 14562 | 15814 | 12399 | 14039 | 11387 | 15518 |
| | | | | | | | | 83% | 84% | 47% | 83% | 48% | 73% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-235678 | ACIS-235678 | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | FAINT | FAINT | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | POINTING | POINTING | On-chip summing requested | N | N |
| [deg] Pointing RA | 156.249768 | 156.2545110196086 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 17.156381 | 17.12939333644049 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 248.355525 | 248.5107558635659 | [s] Primary exposure time | 0.000000 | 3.2 |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | | | |
| [mm] SIM defocus | 0 | 0.001444936568705701 | | | |
| [mm] SIM translation stage pos | -190.132523 | -190.1400660498719 | | | |
| [mm] SIM translation stage offset | 0 | 0.00754346686406393 | | | |
| [s] Observation start time (MET) | 264623178.184000 | 264622051.6815 | | | |
| Observation start date | 2006-05-21T18:25:13 | 2006-05-21T18:07:31 | | | |
| [s] Observation end time (MET) | 264625178.184000 | 264626121.95669 | | | |
| Observation end date | 2006-05-21T18:58:33 | 2006-05-21T19:15:21 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



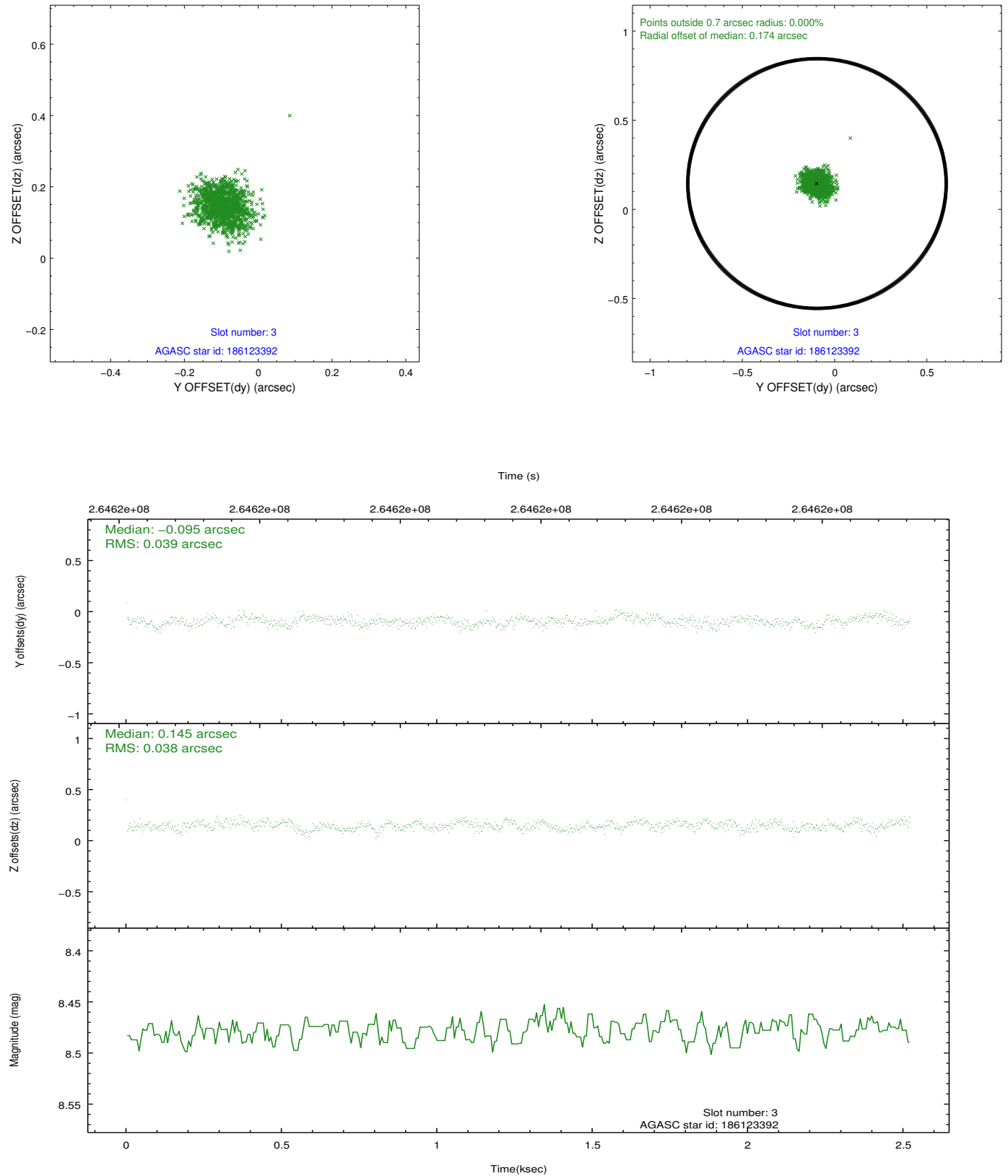


Slot Statistics

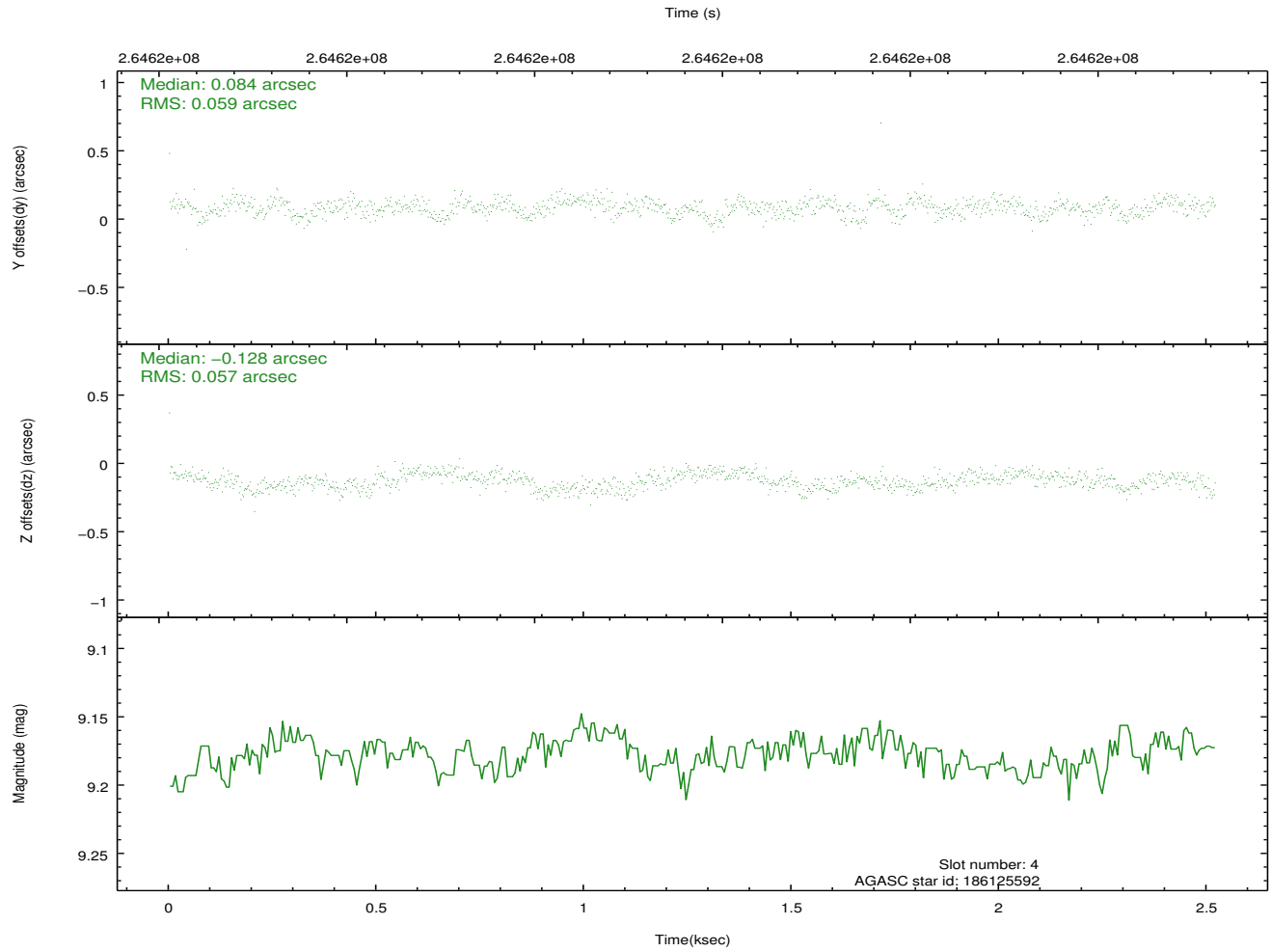
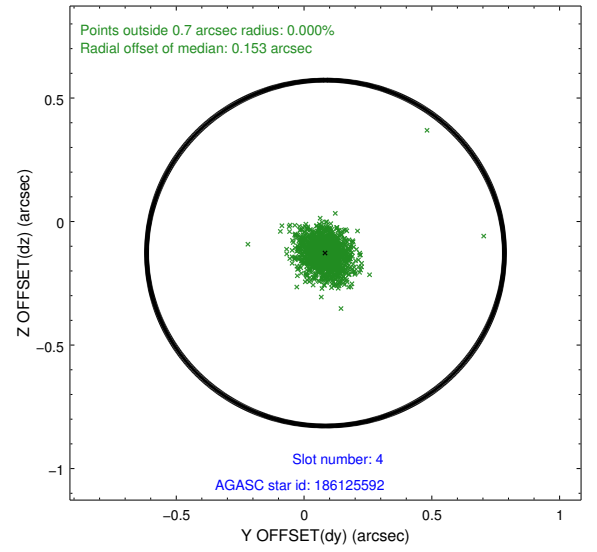
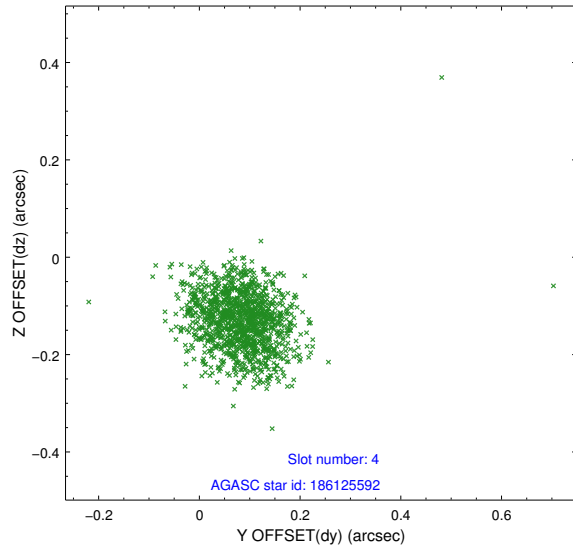
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-S-1 | 7.19 | 615 | 0.033 | -0.046 | 0.008 | 0.013 | 0.000000 | 0.000000 | 936.95 | -1726.95 |
| 1 | FID | ACIS-S-5 | 7.24 | 615 | -0.093 | 0.013 | 0.006 | 0.010 | 0.000000 | 0.000000 | -1810.73 | 168.02 |
| 2 | FID | ACIS-S-6 | 7.36 | 615 | 0.039 | 0.044 | 0.007 | 0.014 | 0.000000 | 0.000000 | 399.74 | 814.91 |
| 3 | GUIDE | 186123392 | 8.48 | 1229 | -0.095 | 0.145 | 0.057 | 0.092 | 156.601033 | 17.224705 | -675.22 | 1031.28 |
| 4 | GUIDE | 186125592 | 9.18 | 1230 | 0.084 | -0.128 | 0.084 | 0.133 | 155.671720 | 16.931227 | 1485.65 | -1552.70 |
| 5 | GUIDE | 186126544 | 8.87 | 1229 | 0.001 | 0.065 | 0.057 | 0.094 | 156.347347 | 16.920247 | 667.41 | 624.47 |
| 6 | GUIDE | 186128392 | 8.64 | 1230 | 0.206 | -0.086 | 0.076 | 0.129 | 155.645250 | 16.741303 | 2155.87 | -1386.66 |
| 7 | GUIDE | 186524120 | 7.90 | 1229 | -0.198 | 0.004 | 0.067 | 0.104 | 156.292810 | 17.527699 | -1295.11 | -357.41 |

2.4 Star Slots

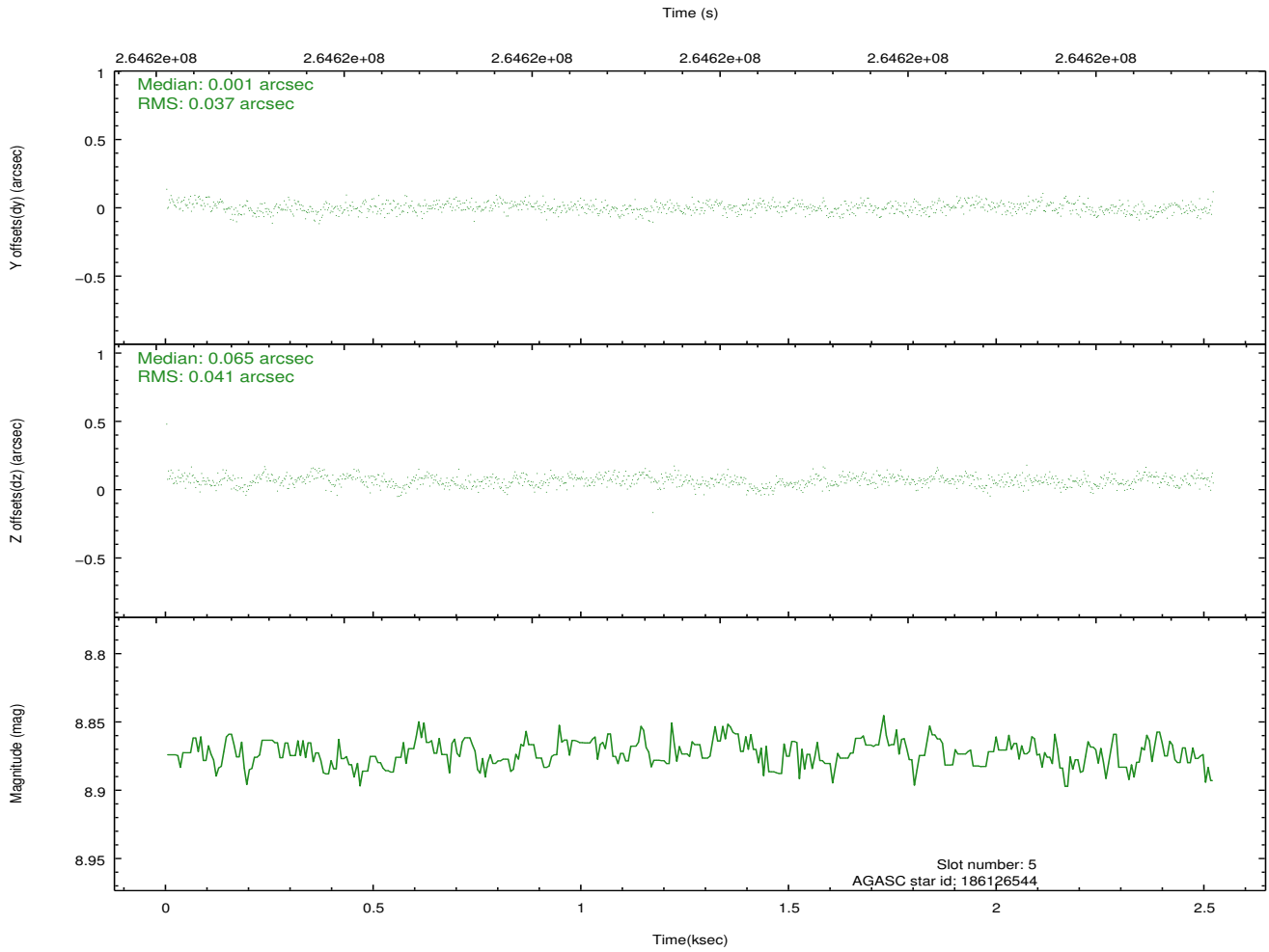
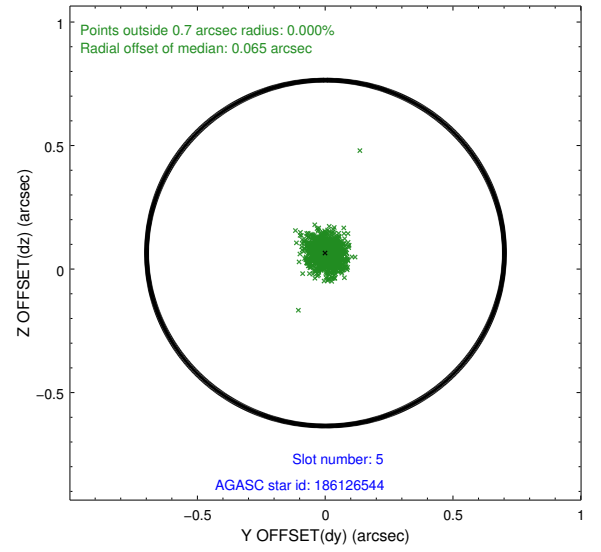
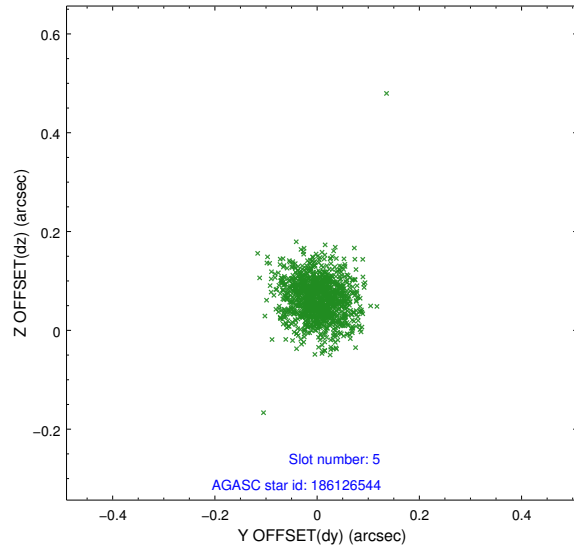
2.4.1 Slot 3



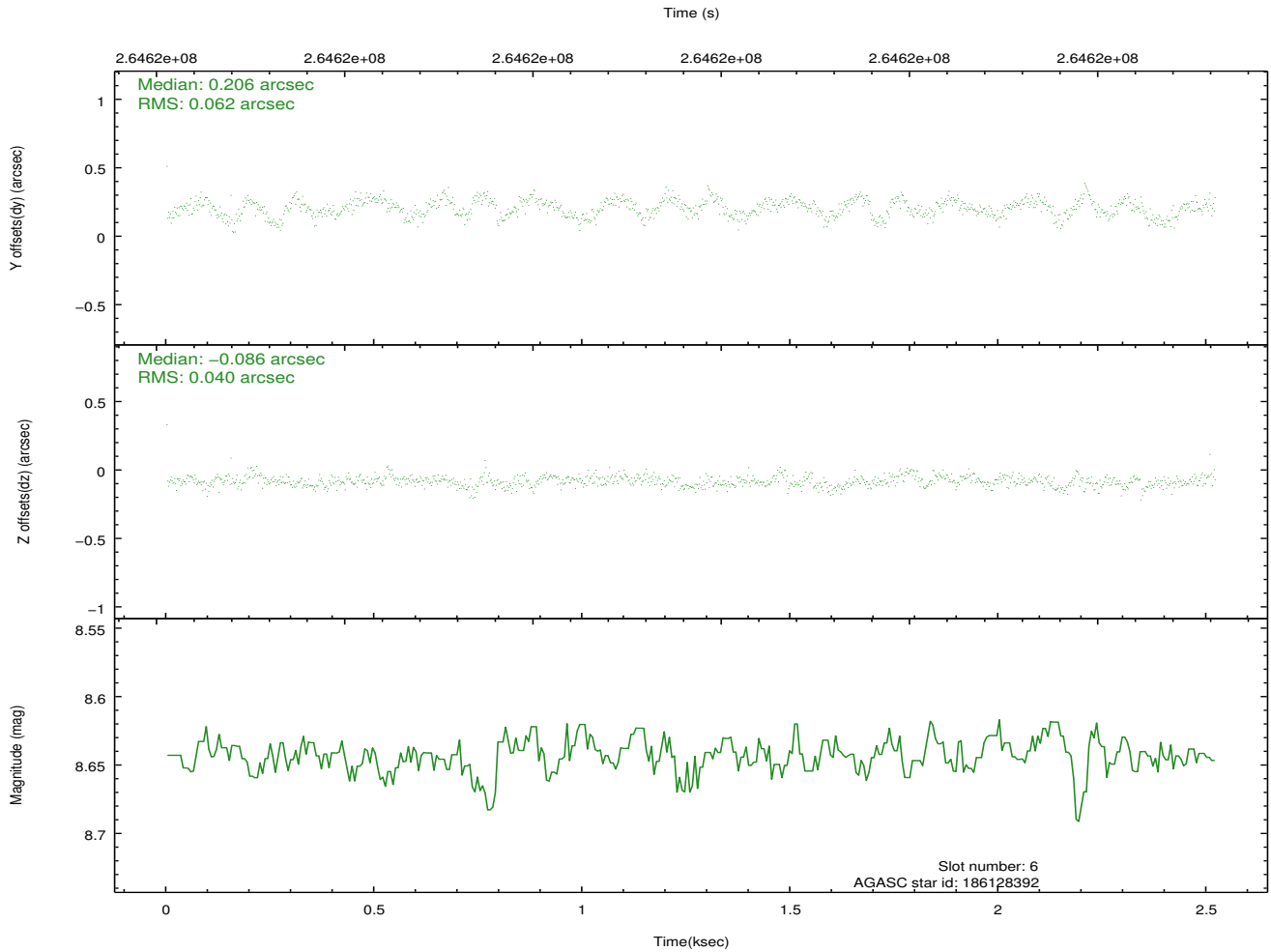
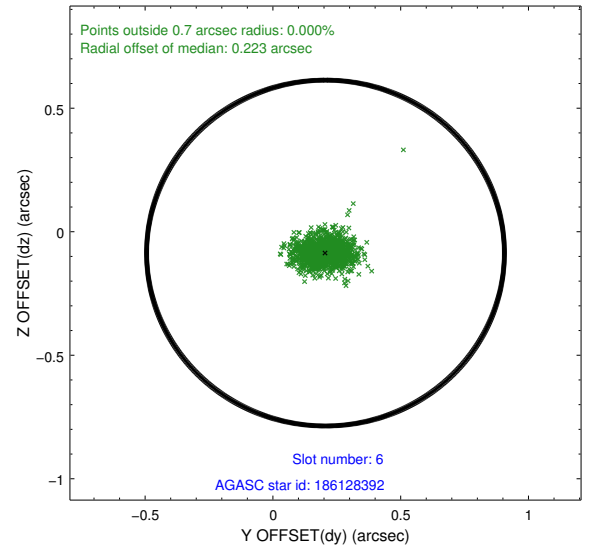
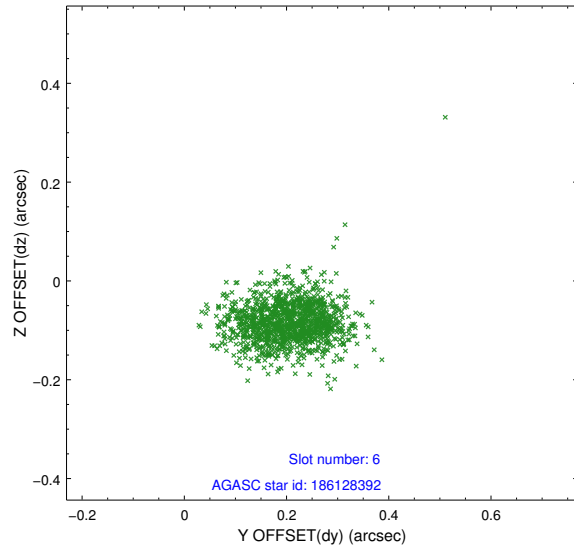
2.4.2 Slot 4



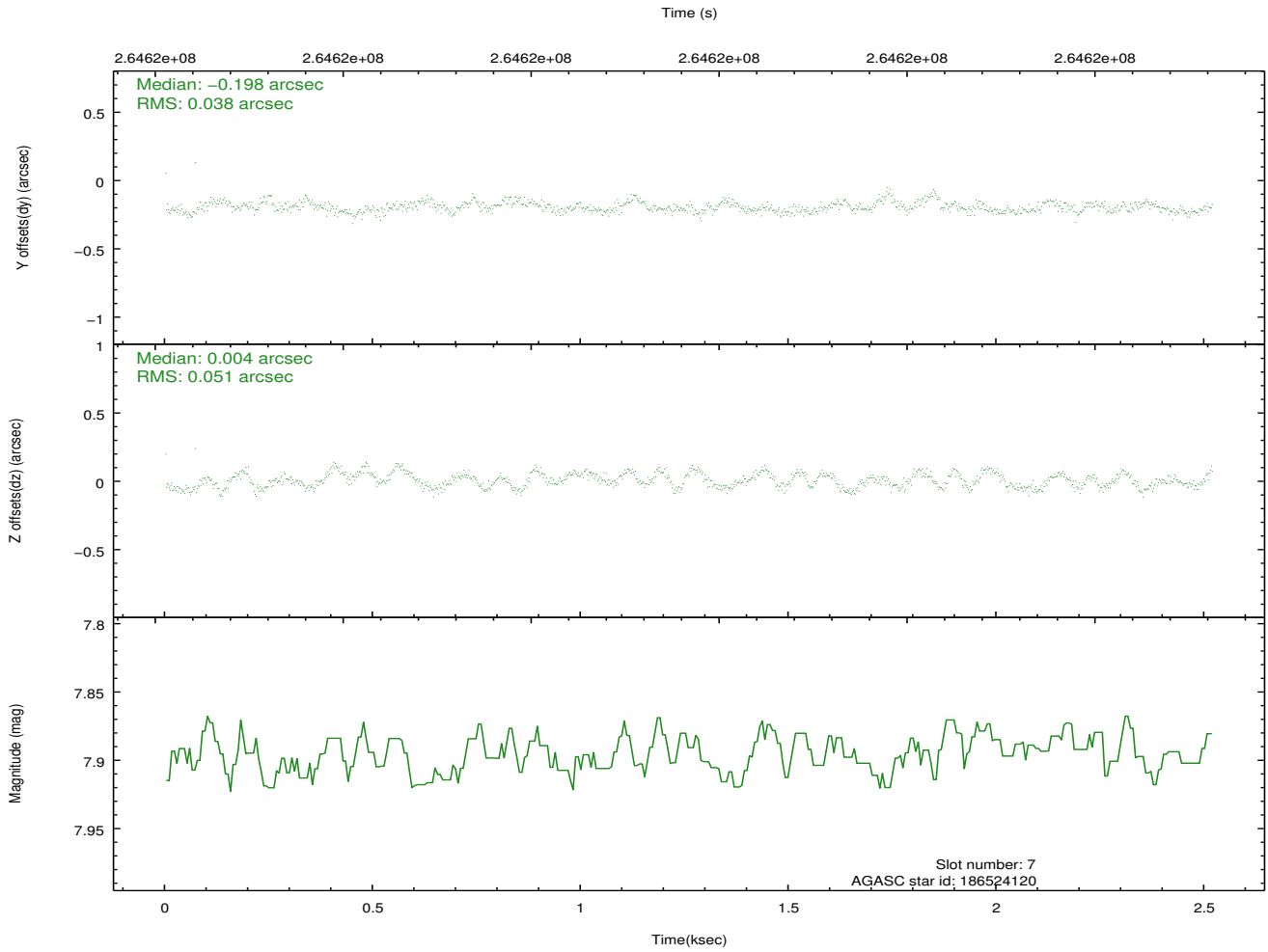
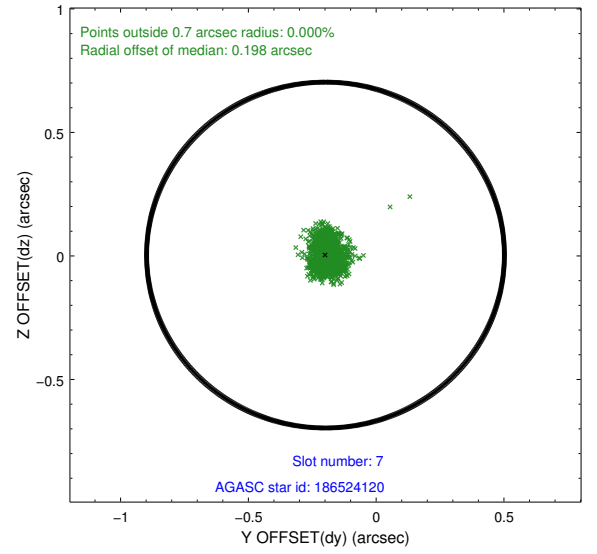
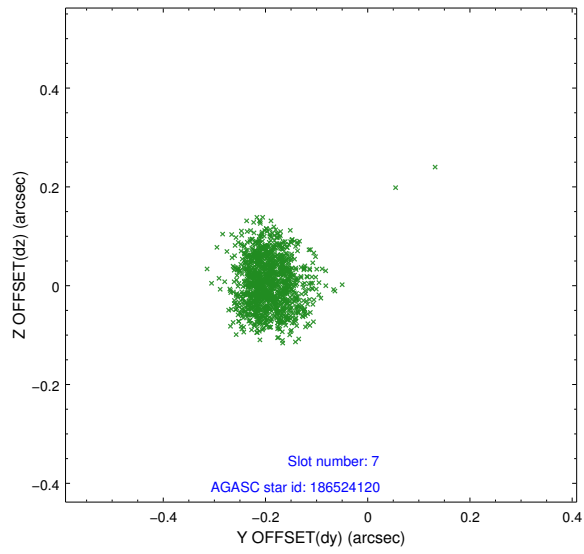
2.4.3 Slot 5



2.4.4 Slot 6

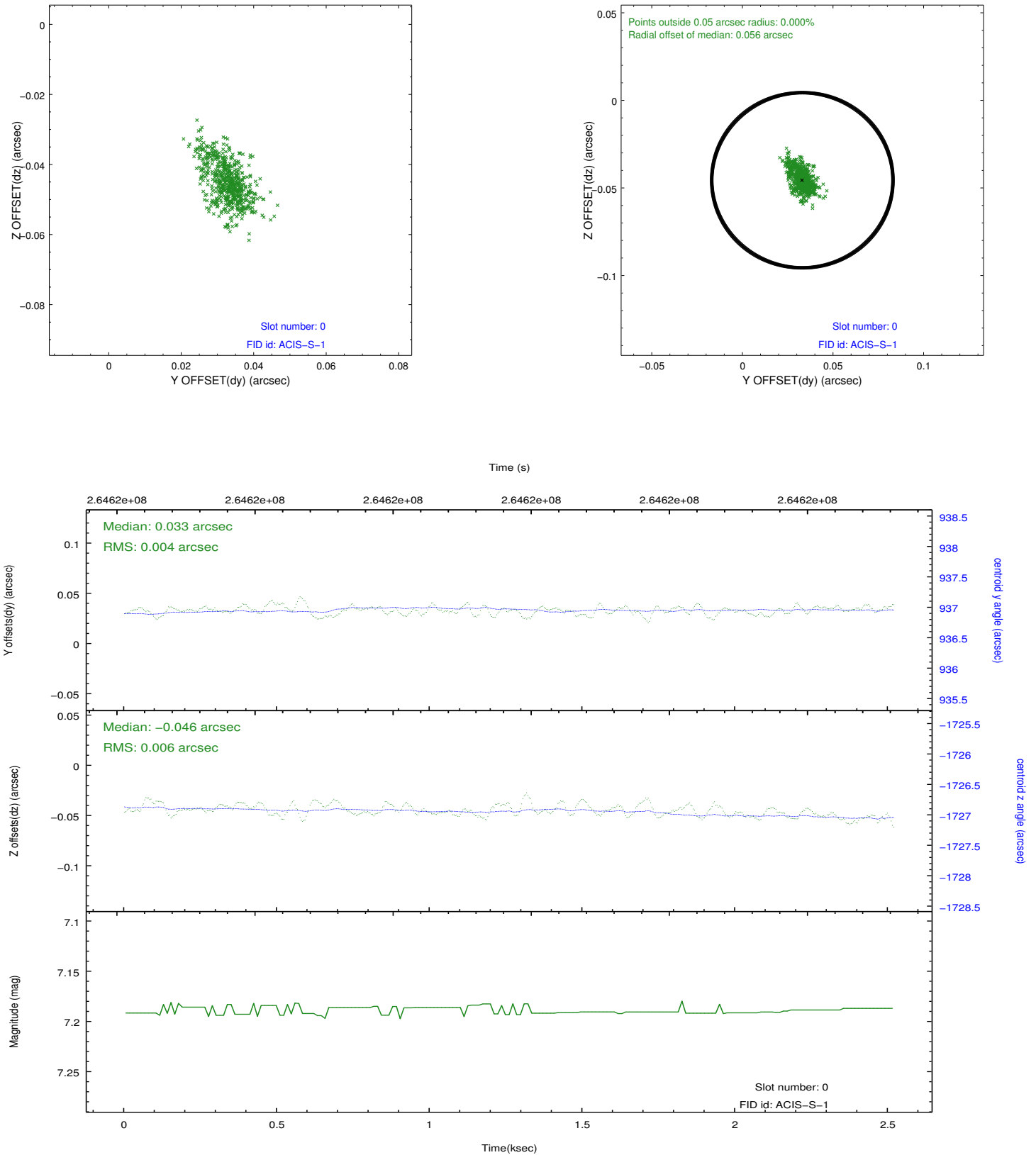


2.4.5 Slot 7

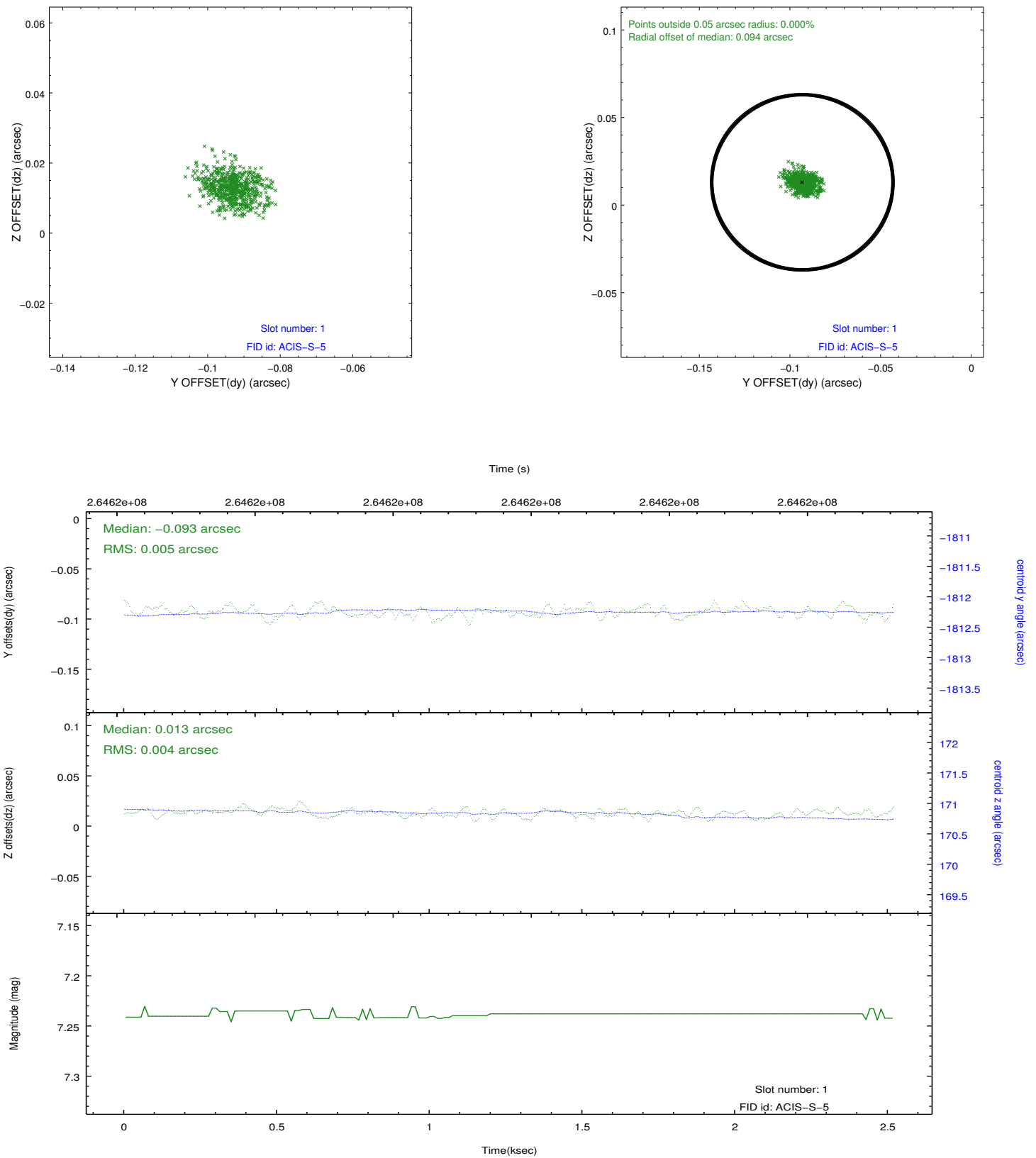


2.5 FID Slots

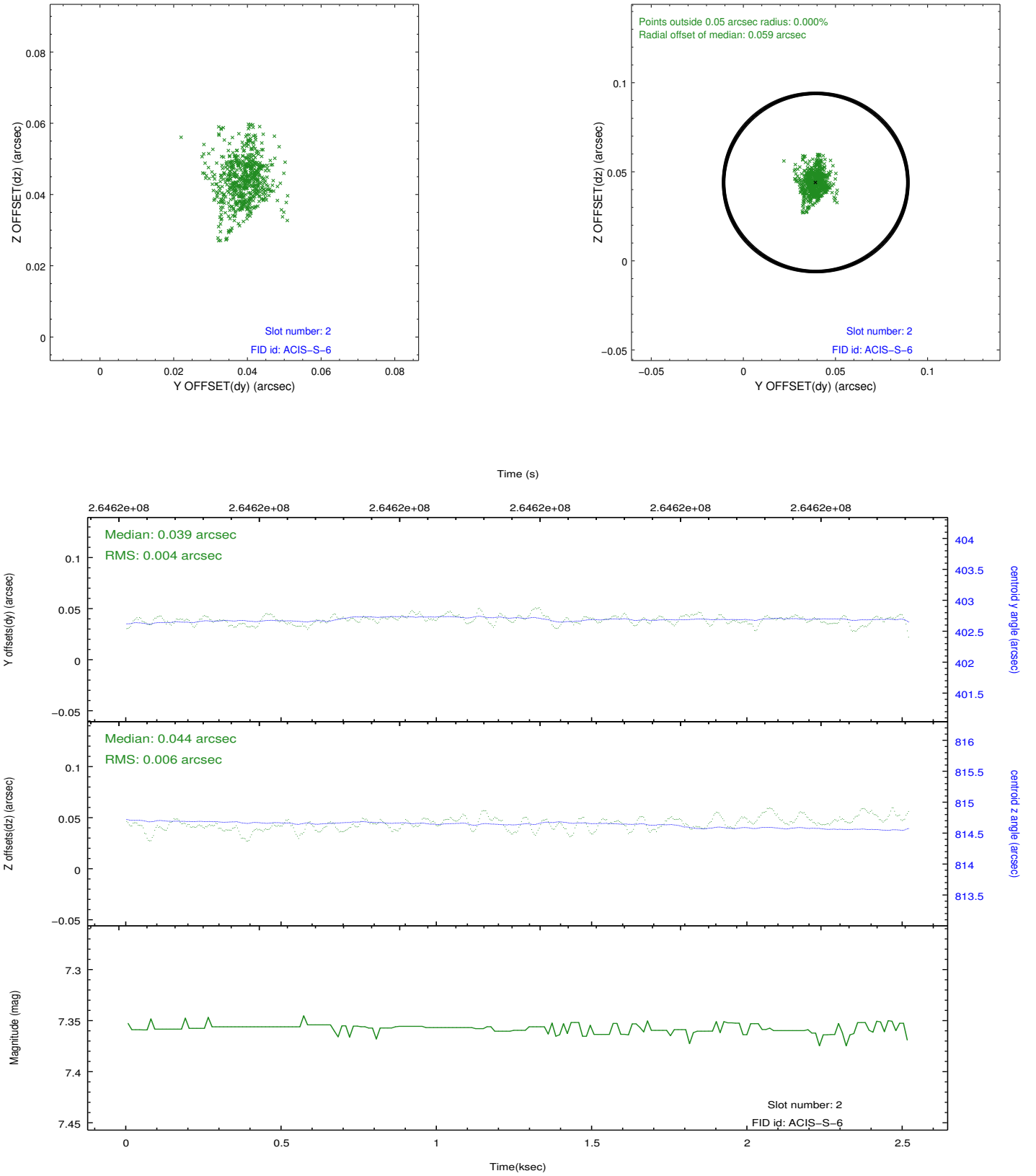
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|------------|
| V&V Scientist | Jen Lauer |
| V&V Date (YYYY-MM-DD) | 2012.04.03 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 1.95199999 |

A.2 Comments